

the promise of money for the preferable adherence to scientific truth. One volume appeared from Dejean himself, the *Species General* of 1825, it covered his Carabidæ and is his best monument today. (To be concluded.)

Lepidoptera.—Mr. Edward D. Keith, of Providence, R. I., reports among species taken last summer rare in that locality *Pieris protodice* ovipositing on pepper grass, *Pamphila philæus*, *Polychrysia formosa*, *Autographa oxygramma*, and *Autographa verruca*.

New Neuroptera from the United States.

By REV. LONGINOS NAVAS, S. J., ZARAGOZA, SPAIN

Two sentences of a letter from my friend, Mr. J. R. de la Torre Bueno, dated October 19th last, have led me to write this paper and send it to America. He said, in regard to the Brooklyn Bulletin: "I trust that from time to time when you have any paper on material I may have sent you, you will kindly favor us with it. . . . It is our wish to make this publication one of the best in the United States." I at once looked up the Neuroptera from the United States I was working on, and I have prepared these notes which I send on with pleasure to help in the good intentions of Mr. de la Torre Bueno. If I should have the happiness of a good reception on the other side of the Atlantic, it would be the best of incentives for more work.

Family MYRMELEONIDÆ: 1. *Mastega* gen. nov.

Similis *Cryptoleoni* Banks.

Antennæ thorace haud longiores, clava forti. Prothorax transversus.

Abdomen ala posteriore brevius, saltem in ♀.

Pedes fortis, tibiis I, II femoribus I, II brevioribus, tibiis posticis femoribus paulo longioribus; calcaribus nullis; tarsis articulis primo et quinto longis, quinto longiore, intermediis brevibus.

Alæ linea plicata manifesta; area costali angusta, venulis plerisque simplicibus, aliquot furcatis; area radiali paucis venulis internis.

Ala anterior area costali paucissimis venulis gradatis ante stigma; area apicali duplici serie venularum gradatarum; area cubitali partim biareolata.

Ala posterior area costali venulis nullis gradatis; area apicali serie venularum gradatarum, ramo obliquo cubiti parallelo postcubito; area postcubitali simplici, angusta.

The following species is the type,

On comparison with *Cryptoleon nebulosus* Oliv., type of the genus *Cryptoleon* Banks, it is evident that it cannot be included in the same genus. *Cryptoleon* can be readily differentiated from this genus by the wing structure. The costal area has many gradiform veinlets in both wings, in the anterior wing nearly in its entire length. The apical area has only one series of gradiform veinlets in both wings.

2. *Mastega texanus* sp. nov.

Flavus, fusco varius.

Caput (fig. 1) flavum, macula inter et pone antennis, ante antennis in lineam lateralem transversam producta, fusca; vertice et occipite linea media longitudinali fusca; oculis fuscis; palpis flavis, labialium articulo ultimo fusiformi, externe fusco notato; antennis fuscis, flavo angustissime annulatis, clava forti, inferne rufescente.

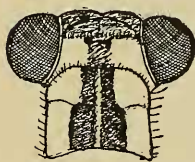


Fig. 1.

Mastega texanus Nav.
Head and Prothorax
(Vienna Mus.)

Prothorax transversus, flavus, pilis later-alibus fuscis, fascia centrali longitudinali in metazona dilatata longitudinaliter divisa, fusca (fig. 1). Mesonotum flavum, proscuto fusco, linea longitudinali media flava, fascia laterali fusca juxta alas. Metanotum flavum, fascia laterali fusca. Pleuræ flavæ, duplici linea longitudinali fusca.

Abdomen flavidum, fusco pilosum.

Pedes flavi, fusco punctati et setosi, apice tiliarum et articulorum tarsorum fusco; tarsorum articulis primo et quinto longis, quinto longiore.

Alæ apice subacutæ, hyalinæ, reticulatione subtota fusca, venis albedo striatis; plerisque venulis et axillis furcularum angustissime fusco limbatis; linea plicata manifesta stigmatum flavo citrino.

Ala anterior area costali venulis plerisque simplicibus, aliquot ante stigma furcatis, paucissimis venulis gradatis (1-2) ante stigma; area apicali duplici serie venularum gradatarum; area radiali 3 venulis inermis, aliqua cellula divisa sectore radii

fere 8 ramis; area cubitali ante ramum obliquum subtota biareolata, ramo aperto; area postcubitali basi biareolata.

Ala posterior area apicali una serie venularum gradatarum; area radiali 2 venulis internis, sectore radii 7 ramis; areas cubitali et postcubitali angustis, simplicibus; ramo obliquo cubiti parallelo postcubito.

Long. corp. ♀ 23 mm.; long. al. ant. 21 mm.; long. al. post. 20 mm.

Habitat.—Texas, Boll, 1875. One example in the Vienna Museum labelled by Brauer *abdominalis*?

Family HEMEROBIIDÆ: 3. *Sympherobius tristis* sp. nov.

Similis *angusto* Banks.

Caput et thorax picei. Abdomen deest.

Antennæ piceæ, pilosæ, longæ, apicem versus attenuatæ. Facies testaceo-fusca, macula in media nigra. Oculi fusci. Palpi nigri.

Pedes fusci.

Alæ apice ellipticæ, ad medium modice dilatatæ, membrana iridea; reticulatione subtota fusca; stigmatibus fuscescentibus, elongatis, manifestis.

Ala anterior (fig. 2) venis fuscis albido punctatis; cubito subtoto, axillari partim fusco marginatis; venulis omnibus fuscis; membrana tota fusco marmorata, excepta basi et area costali.



Fig. 2.

Sympherobius tristis Nav.
Anterior Wing X5
(Col. m.)

Area costalis angusta, venulis plerisque furcatis, venula recurrente basilarum cellulam oblongam angustam claudente. Radius duobus sectoribus. Venulæ discalis fusco marginatæ.

Ala posterior immaculata, ad marginem externum et posticum levissime fusco umbrata; 2 venulis discalibus.

Long. al. ant. 7 mm.; long. al. post. 6 mm.

Habitat.—Pecos, New Mexico, July 13. One example which I found in my collection sent by Mr Banks with the foregoing locality and with the name (in my handwriting). *Micromus variolosus* Hag. so identified by Mr. Banks when he sent it to me. The narrowness of the costal area of the anterior wing gives it a certain likeness to a *Micromus*, but it is a true *Sym-*

pherobius. Banks in citing *Micromus variolosus* Hag. (Trans. Am. Ent. Soc., 1905, p. 46) gives as localities "Pecos and Mesilla, New Mexico," among others.

4. *Micromus nesoticus* sp. nov.

Similis *subantico* Walk.

Caput facie palisque piceis, fronte medio ferruginea, ad latus ante antennis macula triangulari testacea; vertice testaceo longitudinaliter tricarinato, duabus maculis fuscis; oculis fuscis; antennis testaceis, longis.

Thorax fuscus.

Abdomen fuscum, apice testaceum.

Alæ angustæ, ellipticæ, reticulatione fusca, testaceo varia; stigmate indistincto; cellulis discalibus elongatis, hexagonalibus.

Ala anterior (fig. 3) membrana striolis longitudinalibus fuscis singulis inter venas; venis fuscis, testaceo late interruptis, vel potius testaceis, fusco punctatis aut striatis; area costali venulis plerisque furcatis; venulis gradatis fuscis, externis fusco limbatis.



Fig. 3.

Micromus nesoticus Nav.
Anterior Wing X5
(Col. m.)

Ala posterior hyalina, reticulatione uniformi, forti, fusca, ad regionem stigmatis testacea.

Long. corp. 3.8 mm.; long. al. ant. 6.5 mm.; long. al. post. 4.8 mm.

Habitat.—Yaphank, Long Island, N. Y., 26. IX. 12 (de la Torre Bueno).

In general appearance like *subanticus* Walk. It is darker, the wings are narrower and longer, the reticulation darker; in the forewing there are only three radial sectors, in place of four as in *subanticus*.

Family CONIOPTERYGIDÆ: 5. *Conwentzia angulata* sp. nov.

Corpus totum nigrum, exudatione alba.

Antennæ fuscae.

Pedes fortes, femoribus fuscis, tibiis leviter dilatatis, compressis, pallidioribus; tarsis articulo primo longo, ceteris brevibus.

Alæ (fig. 4) membrana grisea vel leviter infumata; reticulatione forti, fusca.

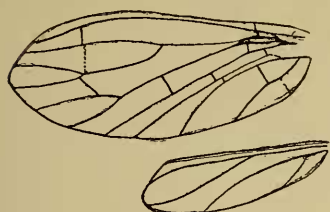


Fig. 4.
Conwentzia angulata Nav.
Wings
(Col. m.)

Ala anterior stria albida longitudinali ante procubitum, ab ortu usque ad furcam apicalem; venula radiali alba; area costali angusta ad basim latiore, una venula distincta prope basim; sectore radii furcato; venula radiali fere cum subcostali continuata, ad petiolum furcæ juxta hujus axillam inserta; venula intermedia obliqua, introrsum inclinata, intra furcam pro-

cupiti inserta, ab ipsa furca sectoris radii prope axillam procedente; 2 venulis procubitalibus, externa duas tertias partes a prima ad furcam procubiti inserta; item 2 venulis cubitalibus, externa intra venulas primam et secundam procubitales inserta.

Ala posterior brevior, angusta, margine antico recto, ante apicem in angulum obtusum flexo; venis usque ad marginem extensis; sectore radii simplici, nulla venula radiali visibili.

Long. corp. 2 mm.; long. al. ant. 2.8 mm.; long. al. post. 1.4 mm.

Habitat.—White Plains, N. Y., one example; another from Westfield, N. J., 31.VIII. 4 (de la Torre Bueno).

6. *Conwentzia axillata* sp. nov.

Totum corpus nigrum, albo copiose exudatum.

Antennæ testaceæ, fere 34 articulis, pilosæ.

Palpi testacei, graciles.

Pedes longi, tibiis distincte longioribus quam femoribus.

Alæ (fig. 5) albæ, cinereo leviter suffusæ; reticulatione cinerea.

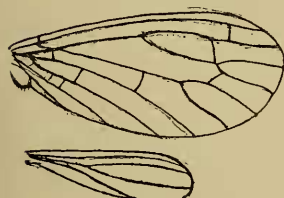


Fig. 5.
Conwentzia axillata Nav.
Wings
(Col. m.)

Ala anterior venula radiali ante venulam subcostalem antice, ante furcam sectoris postice manifeste inserta; venula intermedia obliqua, intra furcam sectoris antice prope axillam, intra furcam procubiti postice longe ab axilla inserta; 2 procubitalibus, externa longe a furca distante; 2 cubitalibus, externa intra primam et secundam procubitalem, propius ad primam seu internam accedente; axilla

in lobum rotundatum prominente.

Ala posterior abdomen longius excedens, angusta, apice late rotundato, obtusa; venis ad marginem pervenientibus; secunda vena furcata, furca longissima, fere triplo longiore quam petiolo.

Long. corp. 1.5 mm.; long. al. ant. 3.3 mm.; long. al. post. 1.5 mm.

Habitat.—White Plains, N. Y. (Bueno.)

Dr. Navas has described in addition five species of Neuroptera collected by Mr. J. R. de la Torre Bueno, locally, descriptions of which follow, as they appeared in comparatively inaccessible foreign publications. (Eds.)

Family HEMEROBIIDÆ: *Lomamyia nearctica* sp. nov.

Similis *texanæ* Banks.

Caput testaceo-flavum; vertice puncto juxta oculos et atomis minutissimis, fuscis, pilis fuscis hirto; oculis plumbeis; antennis flavis, flavo pilosis, articulo primo elongato, aliquot atomis et pilis fuscis; occipite linea media longitudinali fusca.

Thorax testaceus, superne, fusco punctatissimus, interne fusco maculatus; pilis fuscis albisque. Prothorax paulo latior postice quam longior, antrorsum angustatus. Metanotum fusco maculatum, haud punctatum.

Abdomen fuscum, pilis griseis; cercis cylidricis, longis, ad apicem leviter incrassatis, fusco longiter pilosis.

Pedes pallidi, fusco punctatissimi, fusco et albido pilosi; tarsis pallidis, apice articularum fusco.

Alæ post medium dilatatæ, margine externo concavo; membrana partim fuscata; stigmatibus flavo-rufescente, interne fusco limitato.

Ala anterior margine externo excavato et sinuato; venis testaceis, fusco punctatissimis; venulis discalibus fuscis; membrana maculis strisve ferrugineis transversis, ad medium rarioribus, in tertio posteriore et apicali densioribus et in area apicali in limbum coalescentibus; area costali venulis furcatis aut ramosis testaceis, fusco punctatis, ad costam aliquot maculis fuscis; venulis discalibus et axillis furcularum anguste fusco limbatis.

Ala posterior pallidior, reticulatione fulva, dense pilosa;